

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Claims 2 and 3 have been canceled without prejudice.

Claims 1 and 5 have been amended.

Claims 16 to 23 have been added.

Listing of Claims

Claim 1 (currently amended): A compressor comprising:

a housing having a front and a rear, the compressor being driven via the front;
a cylinder head or pressure cover at the rear of the housing;
a drive shaft for a drive mechanism of the compressor, the drive shaft and drive mechanism being at least partially located in the housing;
radial bearings for the drive shaft being located at the front and rear of the housing;

and

at least one axial bearing for the drive shaft, the axial bearing being located in the cylinder head or pressure cover; and

a valve plate, wherein the axial bearing is positioned so that axial tensile forces in the drive shaft press the cylinder head or pressure cover against the valve plate and the cylinder block via the axial bearing.

Claim 2 (canceled).

Claim 3 (canceled).

Claim 4 (original): The compressor as recited in claim 1 wherein the axial bearing is accessible from an outside after assembly of the drive mechanism.

Claim 5 (currently amended): The compressor as recited in claim 1 wherein the pressure cover or cylinder head has a cylindrical recess and the axial bearing is positioned in the cylindrical recess.

Claim 6 (original): The compressor as recited in claim 1 wherein the axial bearing has an adjustable axial position with respect to the drive shaft.

Claim 7 (original): The compressor as recited in claim 6 wherein the axial position between the axial bearing and drive shaft adjusts the drive shaft in relation to a top dead center of the drive mechanism.

Claim 8 (original): The compressor as recited in claim 6 further comprising a shaft washer, the axial bearing being adjustable by threads between the shaft and a shaft washer, an outer surface of the drive shaft having external threads and the bore in the shaft washer having internal threads.

Claim 9 (original): The compressor as recited in claim 8 wherein the threads between the drive shaft and shaft washer exhibit play.

Claim 10 (original): The compressor as recited in claim 9 wherein the threads permit angular adjustability between the drive shaft and the shaft washer.

Claim 11 (original): The compressor as recited in claim 9 wherein the play compensates for radial deflections of the drive shaft, a function of the axial bearing not being impaired by the radial deflections.

Claim 12 (original): The compressor as recited in claim 8 wherein a thread clearance between the drive shaft and shaft washer compensates for an angle error caused by a radial deflection of the drive shaft and the axial bearing.

Claim 13 (original): The compressor as recited in claim 6 wherein after adjustment, the threads are secured against turning from a set angle position by a securing device.

Claim 14 (original): The compressor as recited in claim 1 wherein the compressor is an axial piston compressor, and the drive mechanism is an axial piston drive mechanism for aspirating and compressing a coolant.

Claim 15 (original): The compressor as recited in claim 1 wherein the drive shaft is driven by a pulley mechanism located outside the housing at the front.

Claim 16 (new): A compressor comprising:

- a housing having a front and a rear, the compressor being driven via the front;
- a cylinder head or pressure cover at the rear of the housing;
- a drive shaft for a drive mechanism of the compressor, the drive shaft and drive mechanism being at least partially located in the housing;
- radial bearings for the drive shaft being located at the front and rear of the housing;
- at least one axial bearing for the drive shaft, the axial bearing being located in the cylinder head or pressure cover; and
- the axial bearing has an adjustable axial position with respect to the drive shaft.

Claim 17 (new): The compressor as recited in claim 16 wherein the axial position between the axial bearing and drive shaft adjusts the drive shaft in relation to a top dead center of the drive mechanism.

Claim 18 (new): The compressor as recited in claim 16 further comprising a shaft washer, the axial bearing being adjustable by threads between the shaft and a shaft washer, an outer surface of the drive shaft having external threads and the bore in the shaft washer having internal threads.

Claim 19 (new): The compressor as recited in claim 18 wherein the threads between the drive shaft and shaft washer exhibit play.

Claim 20 (new): The compressor as recited in claim 19 wherein the threads permit angular adjustability between the drive shaft and the shaft washer.

Claim 21 (new): The compressor as recited in claim 19 wherein the play compensates for radial deflections of the drive shaft, a function of the axial bearing not being impaired by the radial deflections.

Claim 22 (new): The compressor as recited in claim 18 wherein a thread clearance between the drive shaft and shaft washer compensates for an angle error caused by a radial deflection of the drive shaft and the axial bearing.

Claim 23 (new): The compressor as recited in claim 16 wherein after adjustment, the threads are secured against turning from a set angle position by a securing device.